

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE**

DYSON TECHNOLOGY LIMITED)	
and DYSON, INC.)	
)	
Plaintiffs,)	No. C.A. 05-434-GMS
v.)	
)	
MAYTAG CORPORATION,)	
)	
Defendant.)	

**PLAINTIFFS' OPENING BRIEF IN SUPPORT OF THEIR
MOTION FOR A PRELIMINARY INJUNCTION**

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NATURE AND STAGE OF THE PROCEEDINGS

This is an action for patent infringement. Plaintiffs Dyson Technology Limited and Dyson, Inc. (collectively, “Dyson”) first learned in June that defendant Maytag Corporation (“Maytag”) was selling a vacuum cleaner called the Hoover “Fusion,” and filed and served their complaint in this action on June 27. The Fusion infringes four validly issued patents owned by plaintiff Dyson Technology Limited: United States Patent No. 4,643,748 (the “’748 Patent”), United States Patent No. 4,826,515 (the “’515 Patent”), United States Patent No. 4,853,008 (the “’008 Patent”) and United States Patent No. 5,858,038 (the “’038 Patent”) (collectively, the “patents-in-suit”).

Dyson now moves, pursuant to Rule 65 of the Federal Rules of Civil Procedure, for a preliminary injunction barring Maytag from making, using, selling, offering to sell and/or importing the infringing Hoover Fusion vacuum cleaner in the United States. As explained below, absent a preliminary injunction, Dyson will suffer irreparable harm in the United States.

SUMMARY OF ARGUMENT

The “Dyson” line of vacuum cleaners has achieved enormous success because of its patented technology. Unlike traditional vacuum cleaners that utilize bags or similar devices to separate dirt and debris from the air, Dyson vacuum cleaners utilize cyclonic technology and other patented inventions. Starting in 1993, Dyson began to sell its vacuum cleaners in the United Kingdom (“UK”), where they soon became leading sellers. In October 2002, plaintiff Dyson, Inc. began selling Dyson vacuum cleaners in the United States. Although Dyson has sold its vacuum cleaners in this country for less than three years, it has achieved a remarkable level of success. Maytag’s infringement of Dyson’s patents, however, threatens to cause irreparable harm to Dyson’s market position in this country.

The patent laws are premised on the right to exclude others from practicing the patented technology. This right serves as an incentive to would-be inventors and entrepreneurs to design and develop new technologies. The technology protected by the four patents-in-suit substantially improves on the cyclonic technology originally invented by James Dyson, who is also the sole inventor of three of the four patents-in-suit and a co-inventor of the fourth. By selling the Hoover Fusion, a vacuum cleaner that uses cyclonic technology and infringes these four valid patents, Maytag—a large and powerful manufacturer and distributor of household and commercial appliances, with annual revenues of about \$4.7 billion—seeks to put an end to Dyson’s recent success in the United States. Dyson is entitled to a preliminary injunction against Maytag’s unlawful importation and sale of its infringing Fusion vacuum cleaner.

1. There Is a Strong Likelihood of Success on the Merits.

There is a strong likelihood that Dyson will succeed on the merits of this patent infringement action. The four patents-in-suit are presumptively valid, and Dyson is entitled by law to exclude others from practicing the inventions protected by these patents. The technologies employed in the patents-in-suit, along with other Dyson improvements, have helped satisfy a long-felt need in the vacuum cleaner market. And, a long history of industry acquiescence in the patents is a testament to their validity. The inventions protected by the four patents-in-suit have been rarely challenged, but instead has been recognized as valid and innovative. In fact, companies have paid to license certain of those patents.

The Hoover Fusion vacuum cleaner clearly infringes the four patents-in-suit. As Dyson's expert, Gareth Jones, explains at length in his accompanying affidavit, the Hoover Fusion utilizes Dyson's technology, and infringes at least one claim in each of the Dyson patents on which plaintiffs here sue.

2. Dyson Will Suffer Irreparable Harm Absent a Preliminary Injunction.

As a result of Maytag's clear infringement of four valid patents, Dyson is entitled by law to a presumption of irreparable harm. Even apart from this presumption, however, there are at least three other factors that establish a clear threat of irreparable injury.

First, Dyson is a new entrant in the United States market for vacuum cleaners. Despite its significant success to date, Dyson has yet to penetrate the mass market in this country and thus to reach the majority of vacuum cleaner purchasers here,

and there is a limited amount of time available to do so. As explained in the accompanying affidavit of Jeffrey Hyman, Dyson's Vice President of Marketing for the United States, if Dyson were to lose its current market momentum as a result of Maytag's infringement, Dyson's current effort to penetrate the mass market might fail, and the effects could be permanent and irreversible. Maytag's recent introduction of the Hoover Fusion—the first Hoover vacuum cleaner ever to employ the cyclonic technology invented by James Dyson—is a clear attempt to stop Dyson from succeeding in that market. With the decades-old Hoover brand, Maytag has set out to convince consumers that the Fusion offers Dyson's technology at a fraction of the price. The threat of harm to Dyson is particularly acute because Maytag's recent release of the Hoover Fusion at Wal-Mart stores coincided with Dyson's own national rollout with Wal-Mart, a critical component of Dyson's effort to penetrate the mass market.

Second, Maytag did not begin selling the Hoover Fusion until June 2005. At present, it appears that Maytag has not begun widespread advertising or promotion of this product, which Maytag first mentioned on its website in early July 2005. To Dyson's knowledge, the Hoover Fusion is now available only at certain Wal-Mart stores. If Maytag begins broadly promoting the infringing product and offering it for sale in retail stores throughout the United States—and Maytag is certainly capable of doing so, for its existing distribution network includes four of the top five major appliance retailers in the country—an award of money damages might well be inadequate to restore Dyson to the position it now holds or would otherwise obtain in the marketplace.

Third, two of the four patents-in-suit expire during the first half of next year: the '748 Patent expires on February 24, 2006, and the '515 Patent expires on

May 2, 2006. The very nature of the patent right is the right to exclude others. Unless Maytag is promptly enjoined, it in effect will have awarded itself a license in the United States to these two patents for their remaining terms.

3. The Balance of Hardships Supports the Issuance of a Preliminary Injunction.

The balance of hardships also supports the issuance of a preliminary injunction. Dyson is still in the process of making a name for itself with most consumers in the United States, whereas Maytag's "Hoover" brand is virtually synonymous with vacuum cleaners. Maytag's infringement of Dyson's patents threatens to damage severely Dyson's current effort to penetrate the mass market in the United States, an effort that is critical to Dyson's future success. In contrast, any hardship that Maytag might experience upon the issuance of a preliminary injunction is negligible. Maytag began selling the Hoover Fusion only last month, and it has more than sixty other vacuum cleaner models that would be unaffected by a preliminary injunction. In contrast, Dyson's vacuum cleaners all use Dyson's cyclonic technology.

4. The Public Interest Supports the Issuance of a Preliminary Injunction.

The public's interest in the protection of patent rights clearly supports the issuance of an immediate injunction. This public interest may be overcome only in the most drastic of circumstances, which do not exist here. If a preliminary injunction issues, only one vacuum cleaner of the many offered by Maytag (and the large number of other competitors in the United States) will be taken off the shelf. A preliminary injunction thus will have no adverse effect on the public interest.

STATEMENT OF FACTS

A. The Parties

1. Dyson Technology Limited and Dyson, Inc.

Plaintiff Dyson Technology Limited owns the four patents-in-suit.

Affidavit of James Dyson, sworn to July 22, 2005 (“Dyson Aff.”), ¶ 1 (A7).¹ Plaintiff Dyson, Inc.—an affiliate of Dyson Technology Limited—sells “Dyson” branded vacuum cleaners in the United States, and both plaintiffs are subsidiaries of Dyson James Limited, a company founded by James Dyson. *Id.*

2. Maytag

Defendant Maytag claims to be “among the top four major appliance companies in the North American market, offering consumers a full line of washers, dryers, dishwashers, refrigerators and ranges distributed through large and small retailers across the United States and Canada.” Maytag Corp., Annual Report (Form 10-K), at 1 (February 18, 2005) (A227). Last year, Maytag had about \$4.7 billion in sales. *Id.* at 5 (A231).

Hoover is a division of Maytag. The “Hoover” brand has existed for decades, and it has immediate recognizability and credibility among consumers.

Affidavit of Jeffrey Hyman, sworn to July 22, 2005 (“Hyman Aff.”), ¶ 25 (A220-21).

Hoover “offers a full line of products, including full-size uprights and canisters, extractors, stick cleaners, hand-held cleaners, hard-floor cleaners, central vacuum

¹ Dyson’s supporting material and unreported opinions are collected in Plaintiffs’ Appendix to Plaintiffs’ Opening Brief in Support of Their Motion for a Preliminary Injunction.

systems and commercial products.” See <http://159.41.169.144/pressroom/js/profile.jsp?app=hoover>. Indeed, besides the infringing Fusion, Maytag sells more than 60 models of Hoover vacuum cleaners. See generally www.hoover.com. These products are sold at many major American retailers, including Sears, Lowe’s, Best Buy, Wal-Mart, Target, K-Mart, Bed Bath & Beyond, Linens & Things, JC Penny, Costco, Sam’s Club and Amazon.com. *Id.* Indeed, Sears, Lowe’s, Best Buy and Wal-Mart are four of the top five major appliance retailers in this country. Dyson Aff. ¶ 36 (A21). Maytag even claims that the Hoover brand is “the market leader in North America and the floor care brand with the highest consumer recognition and buying preference.” See http://maytag.com/mths/our_company/default.jsp?L1=1&L2=0. Although plaintiffs do not yet know the precise figures, it is clear that sales of the Fusion are a tiny percentage of Hoover vacuum cleaner sales, and that all vacuum cleaners are but a small percentage of Maytag’s total revenues.

B. Background

In 1978, James Dyson set about to make a better vacuum cleaner. Dyson Aff. ¶ 6 (A9). The inspiration for this endeavor was the result of two personal experiences.

Mr. Dyson then worked at a company that manufactured the “Ball Barrow,” an improved design of a wheelbarrow. Dyson Aff. ¶ 7 (A9). The metal frames of the barrows were sprayed with an epoxy powder, but large amounts of the sprayed powder would miss the frame and be collected for re-use by means of a large fan that provided enormous suction to draw the air and powder into a cloth filter. *Id.* This spraying had to stop every hour or so, however, because the cloth screen filled and

clogged, and thus had to be emptied and brushed down in a time-consuming and inefficient manner. *Id.* This process was quite unsatisfactory, and Mr. Dyson improved it by building and using a large cyclone to suck air into a cone-shaped device where the powder would be separated from the air by centrifugal force and dropped out the bottom of the cone. Dyson Aff. ¶¶ 8-9 (A10).

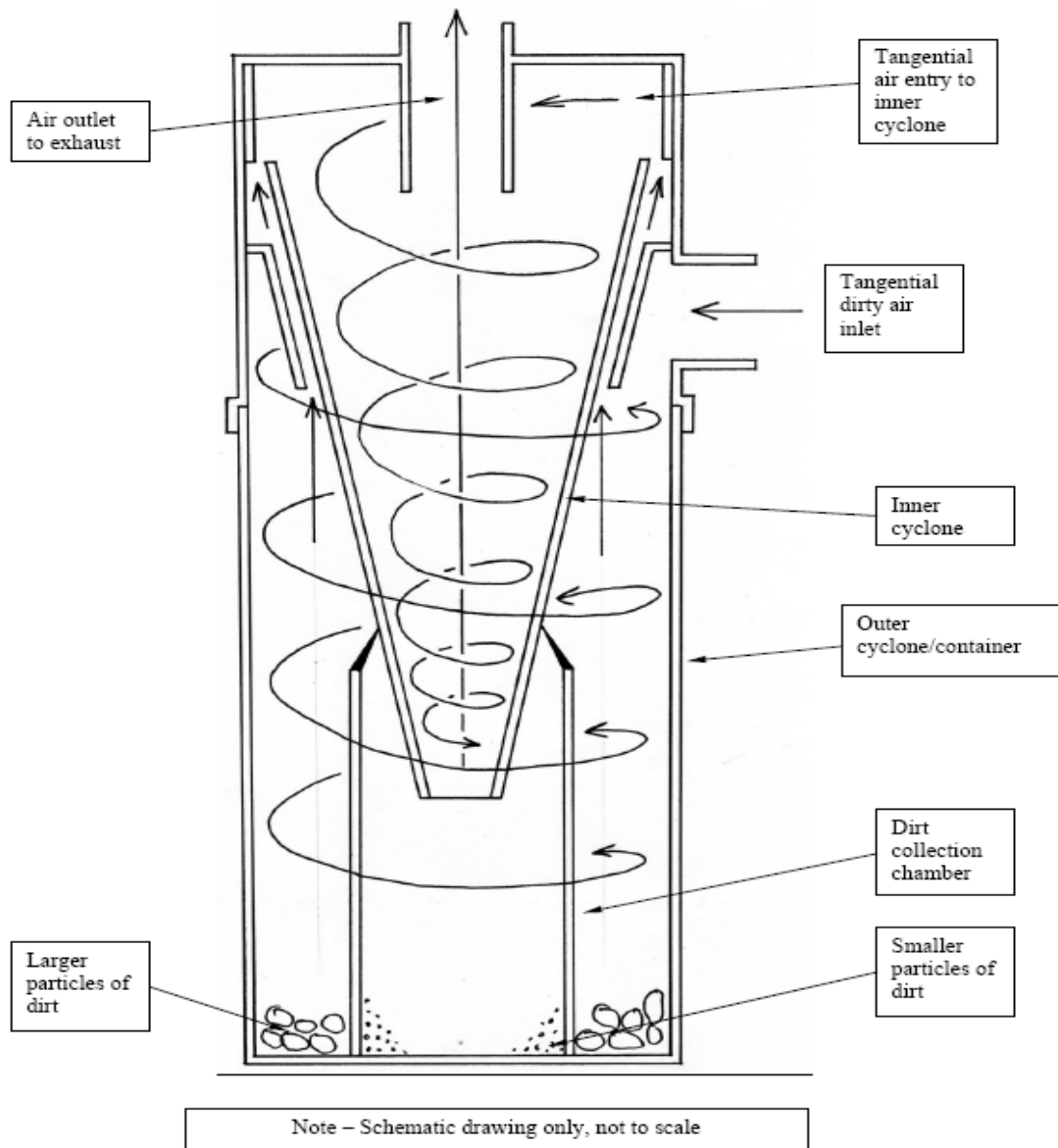
At around the same time, Mr. Dyson was doing the vacuum cleaning at home using a newly-purchased Hoover vacuum cleaner, which, like all others, separated dirt from air by sucking the air through a paper bag. Dyson Aff. ¶ 10 (A10). Mr. Dyson was immediately struck by the fact that although the new vacuum cleaner seemed to work well for a room or two, it soon lost suction. *Id.* When he later went to replace the paper bag, Mr. Dyson experimented a bit and eventually realized that the problem was not that the bag was full, but that the dust was clogging the pores in the bag, thereby reducing the airflow through the cleaner. *Id.* It then occurred to him that a form of cyclone technology—like that being used to make the Ball Barrow—might work well in a vacuum cleaner. Dyson Aff. ¶ 11 (A11).

Working out of a carriage house in the back of his home, Mr. Dyson spent five years conducting thousands of experiments and designing and re-designing numerous prototypes of bagless vacuum cleaners. Dyson Aff. ¶ 15 (A12). Eventually, he came up with a vacuum cleaner unlike any other that had ever been made before. *Id.* Using cyclonic technology, this vacuum cleaner was capable of capturing the wide variety of typical household dirt and debris without losing suction. *Id.*

Mr. Dyson's cyclonic technology consists of an outer, relatively low-speed cyclone formed by a cylinder-shaped container and an inner, high-speed cyclone

formed by a cone-shaped device. Dyson Aff. ¶ 16 (A13). Air flows tangentially into the outer container at high speed, creating centrifugal force that separates larger particles from the air and deposits them at the bottom of this container. *Id.* The air from the outer container then makes its way into the top of the cone-shaped inner cyclone, increasing the velocity of the particles to a much higher speed. *Id.* This increased velocity creates sufficient centrifugal force to separate the smallest particles, and these particles then are trapped in a separate dirt container at the bottom of the cone-shaped cyclone. *Id.*

Because the dirt and debris are trapped at the bottom of the container—and the air flow thus does not have to travel through a bag or other membrane that can clog—a vacuum cleaner using the James Dyson invention does not lose suction. *Id.* The diagram below, which is Exhibit 2 to the Affidavit of Gareth Evan Lyn Jones, sworn to July 25, 2005 (“Jones Aff.”) (A80), illustrates the basics of this technology.

Exhibit 2 – Diagram illustrating Dyson's cyclonic technology

In light of the significant debt he had accumulated, James Dyson had little option but to try to license his invention. Dyson Aff. ¶ 17 (A13). Beginning in the early 1980s, he approached a number of companies in the vacuum cleaner business with prototypes of his cyclonic technology, hoping they would provide him with funding to develop more fully the technology. *Id.* Most companies, however, were not interested.

Id. These traditional vacuum cleaner companies had always used bags for collecting dirt and did not wish to consider a new technology. *Id.* Indeed, it is a well-noted fact that entrenched companies in a mature industry often decline to explore new—and perhaps better—technologies, instead treating the “better mousetrap” as if it were a threat.

This sort of attitude was exhibited by a Hoover employee soon after James Dyson’s cyclonic vacuum cleaners were introduced in the UK. In November 1995, Mike Rutter, who then worked for the UK company that sold Hoover vacuum cleaners and that, until June 1995, had long been owned by Maytag, appeared on a UK television show called “Money Programme.” Dyson Aff. ¶ 18 (A14). Mr. Rutter made the startling admission that Hoover regretted not buying Mr. Dyson’s technology in order to bury it—as Rutter stated, Hoover should have acquired Dyson’s inventions and then put the technology “on the shelf” where it would never have seen the light of day. Dyson Aff., Ex. 1 (A24). When he was asked on television about the cyclonic technology invented by James Dyson, Mr. Rutter stated, “Well, in terms of cyclonic arrangement it has some benefits, he’s exploited them, but he’s patented them, so even if we chose to go down that route, in terms of large scale benefits we can’t, so we won’t.” *Id.*

Ultimately, some of the less prominent vacuum cleaner companies licensed Mr. Dyson’s technology. In the mid-1980s, a Japanese company called Apex licensed some Dyson technology for use in a vacuum cleaner called “G-Force.” Dyson Aff. ¶ 19 (A14). Around the same time, a Canadian company called Iona entered into a license agreement covering Canada and the United States. *Id.* In later years, Mr. Dyson also agreed to licensing arrangements with other companies in North America and the

UK. *Id.* A copy of a license agreement for certain of Mr. Dyson's technologies, including those protected by the '748, '515 and '008 Patents, is attached to Mr. Dyson's Affidavit as Exhibit 2 (A25).

The royalty payments from these licenses helped Mr. Dyson pay down his debt and return to his initial strategy of manufacturing and selling cyclonic vacuum cleaners himself. Dyson Aff. ¶ 20 (A15). Beginning in the early 1990s, he and a team of four design engineers developed the first Dyson branded vacuum cleaner. *Id.* ¶ 21 (A15). This product, known as the model DA001, became available for purchase in the UK in January 1993. *Id.*

Dyson vacuum cleaners very quickly achieved remarkable success in the UK. By late 1995, Dyson had captured the largest share of the UK vacuum cleaner market as measured by value, displacing the previous market leaders, Electrolux and Hoover. Dyson Aff. ¶ 22 (A15). According to a published report, Dyson's share of the UK vacuum cleaner market had increased by 2002 to about 45% in value. *Id.* Today, Dyson is the number one producer of vacuum cleaners in the UK both by units and value. Hyman Aff. ¶ 8 (A214).

In October 2002, plaintiff Dyson, Inc. began selling Dyson vacuum cleaners in the United States, the largest market for vacuum cleaners in the world. Hyman Aff. ¶¶ 7-8 (A214); Dyson Aff. ¶ 1 (A7). Recently published statistics show that, in the short time its products have been available in our country, Dyson has become the number one seller of upright vacuum cleaners as measured by value, accounting for about 29% of that market. Hyman Aff. ¶ 10 (A215). In terms of units sold, Dyson accounts for about 9.7% of that market. *Id.*

C. The Patents-In-Suit

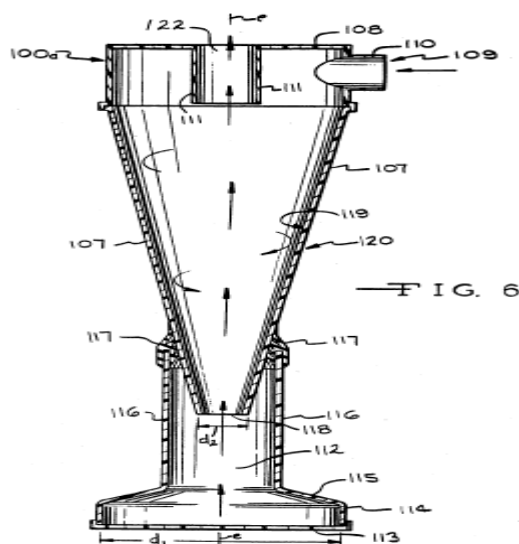
Since Mr. Dyson created his first cyclonic vacuum cleaner, he and others working for him have spent innumerable hours and resources experimenting with and developing improvements. As a result of those efforts, Dyson has obtained a number of U.S. patents covering new inventions, many of which have been employed on Dyson vacuum cleaners sold in the United States and elsewhere. Dyson Aff. ¶¶ 24-25 (A16-17).

The patents that Maytag is infringing are for certain of these improvements, and are owned by plaintiff Dyson Technology Limited. Dyson Aff. ¶¶ 27-31 (A17-19). Two of the four patents—the '748 Patent and the '515 Patent—expire in the next nine or so months. (The '748 Patent expires on February 24, 2006, and the '515 Patent expires on May 2, 2006.)

1. The '515 Patent

The inventions claimed in the '515 Patent, which was granted in 1989, include a circular dirt collection chamber below the inner cyclone that has a diameter at the end furthest from the opening of the bottom of the inner cyclone that is at least three times the diameter of that opening. Jones Aff. ¶ 13 (A86). As the patent specification states, although prior cyclonic technology worked well, improvements were needed because “particles collected at the bottom of the cyclone may become re-entrained in the air-flow in the body, or may never settle out at the bottom of the body, remaining entrained in the air-flow through the cyclone.” Column 1 of the '515 Patent, lines 52-55 (A157). “In either of these circumstances the dust particles are caused to rise up towards the exhaust port, in the axially upwardly moving air-flow within the cyclone body from the dust collected in the cyclones,” and are “exhausted from the cyclone contaminating

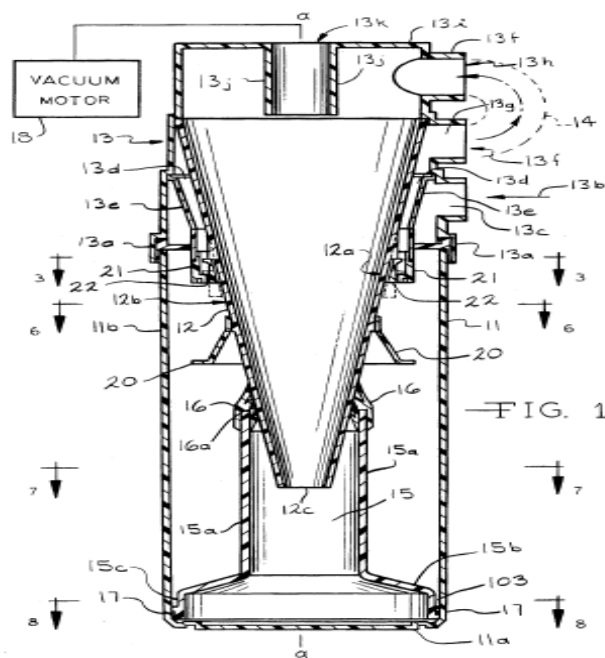
the otherwise cleaned air.” Column 1, lines 55-61 (A157). Through experimentation with numerous collection chamber sizes, James Dyson discovered that setting the diameter of the dirt collection chamber at the end furthest from the opening of the bottom of the inner cyclone at a minimum of three times the diameter of that opening helps to prevent dirt and other debris from re-entering the inner cyclone after being deposited into the collection chamber at the bottom of the inner cyclone. Dyson Aff. ¶ 30 (A18-19). This innovation is illustrated in Figure 6 of the '515 Patent, a copy of which is shown below. The dirt collection chamber is item no. 112.



2. The '748 Patent

The inventions claimed in the '748 Patent, which was granted in 1987, include a disc that surrounds the inner cyclone and is designed, among other things, to prevent larger particles and long strands, such as human hair, from leaving the outer container and clogging the air outlet from the outer container. Jones Aff. ¶ 14 (A86). The patent specification explains that in the prior art, there was no means for preventing the clogging of the air outlet from the outer container leading to the inner cyclone other

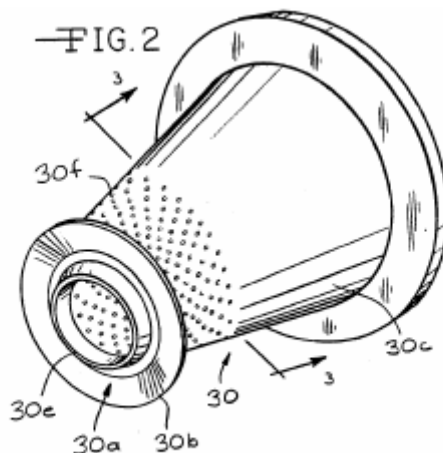
than the use of a filter in the air outlet, which would defeat the purpose of a cyclonic cleaning apparatus. Column 1 of the '748 Patent, lines 21-29 (A184). The use of a disc was arrived at only after numerous other designs were tried and tested. Dyson Aff. ¶ 28 (A18). The disc invention—pictured below as item 20—is illustrated in Figure 1 of the '748 Patent, a copy of which is shown below.



3. The '008 Patent

The '008 Patent was issued in 1989, and claims both a disc and a shroud that surround the inner cyclone. Jones Aff. ¶ 15 (A86). The shroud is a covering with perforations that acts like a screen and is intended to prevent larger, lightweight fibrous material from escaping the outer container, and the disc, which is located below the shroud, helps to prevent larger particles and long strands from clogging the holes of the shroud. *Id.* The '008 Patent places the disc at the lower end of the shroud for mounting on the outside of the inner cyclone. Dyson Aff. ¶ 29 (A18). This design improved

further on the '748 Patent. *Id.* After much experimentation, Mr. Dyson discovered that placement of the disc at this location provided better separation of dirt in the outer container than was achieved in the prior art. *Id.* The disc and shroud are illustrated in Figure 2 of the '008 Patent, a copy of which is shown below.



4. The '038 Patent

The last patent-in-suit, the '038 Patent, was granted on January 12, 1999, and sets out the most advantageous distances between the opening of the bottom of the inner cyclone and the base surface of the outer container. Jones Aff. ¶ 16 (A87). As the patent specification states, it was previously assumed in the prior art that as large a distance as possible between the base surface and the cone opening was desirable. '038 Patent, Column 1, line 66 to Column 2, line 1 (A205). Through experimentation, James Dyson and his co-inventors determined that varying the distance can affect the separation efficiency of the apparatus and that the “[m]axima of separation efficiency for different sizes of cyclone and collector occur when the distance between the base surface and the cone opening lies in the range 30 mm to 70 mm.” Column 2, lines 8-13 (A205).

“Surprisingly, a distance of less than 8 mm” also was found to be “highly efficient.”

Column 2, lines 14-15 (A205); *see* Jones Aff. ¶ 16 (A87).

D. The Infringing Product

There is no doubt that Dyson’s success in the United States vacuum cleaner market since late 2002 has caught Maytag’s attention. As of July 2005, Maytag’s Hoover division website (www.hoover.com) contained an advertisement on its opening webpage that specifically and exclusively targets vacuum cleaners sold by Dyson. Dyson Aff. ¶ 32 (A19).

In June 2005, Maytag began selling a vacuum cleaner known as the Hoover Fusion in Wal-Mart stores in the United States. Hyman Aff. ¶ 18 (A218). This vacuum cleaner infringes at least one claim of each of the four patents-in-suit. Jones Aff. ¶ 10 (A85). As set out in detail in the Jones Affidavit, the Hoover Fusion vacuum cleaner employs Dyson’s cyclonic technology and each of the patented improvements described above. Jones Aff. ¶ 17 (A87).

To Dyson’s knowledge, this is the first time that anyone has attempted to infringe the ’008 or ’038 Patent since they were issued, and Dyson is aware of only one company that ever attempted to infringe the ’748 and ’515 Patents. Dyson Aff. ¶ 35 (A20). In that case, Dyson sued Amway, the alleged infringer. The case was settled and Amway subsequently took a license to certain Dyson technologies, including technologies protected by the ’748 and ’515 Patents. *Id.*

Maytag’s infringement has just begun. Dyson Aff. ¶ 36 (A21). Dyson first learned of the Hoover Fusion in June 2005 when a Dyson salesperson saw a Fusion vacuum cleaner at a Wal-Mart store in upstate New York. Hyman Aff. ¶ 18 (A218).

And the Fusion has been available on the Hoover and Wal-Mart websites only since early July. *Id.* ¶ 21 (A219).

E. Threat of Irreparable Injury

Dyson faced a number of significant hurdles when it entered the U.S. vacuum cleaner market in October 2002. Hyman Aff. ¶ 9 (A214). Consumers in the United States had not heard of the Dyson brand, and its cyclonic vacuum cleaners often cost about three times as much as most other vacuum cleaners. *Id.* In addition, the U.S. vacuum cleaner market was and is relatively mature and crowded, including some competitors such as Maytag's Hoover division that had been around for decades and have strong brand recognition. *Id.*

Primarily because of its technology, Dyson has been remarkably successful in overcoming these challenges in a short period of time. Hyman Aff. ¶¶ 10-11 (A215). As Jeffrey Hyman, Vice President of Marketing for the United States, explains in his affidavit:

Simply stated, James Dyson and Dyson's engineers have invented a better mousetrap. In our experience, once consumers learn about our products, they discover that Dyson's technology delivers superior cleaning results while never losing suction. Consumers even are willing to pay a price premium for this performance. Consumers also are attracted to the fact that Dyson's vacuum cleaners do not require them to buy bags or new filters, which reduces their total cost of ownership.

Id. ¶ 11 (A215).

Dyson's initial progress in the United States in no way guarantees future success, and this is a particularly critical time for Dyson in this country. Hyman Aff. ¶ 12 (A215-16). Dyson's success in the U.S. market has come about because its products

appeal to so-called “early adopters,” which make up a relatively small percentage of total consumers. *Id.* ¶ 13 (A216). As a general matter, early adopters, who tend to have higher incomes and be better educated than the average consumer, are more willing than others to try new products, particularly those offering new technology. *Id.* For Dyson to maintain and expand its position in this country, it must penetrate the mass market. Hyman Aff. ¶ 14 (A216-17). If Dyson is unable to do so, its sales in the United States will stagnate, and its vacuum cleaners may be relegated to low-volume, niche status. *Id.*

Dyson has recently taken several steps to penetrate the mass market, including entering into agreements with two large, national retailers—Target and Wal-Mart. Hyman Aff. ¶ 15 (A217). The Wal-Mart deal, which was reached after about two years of discussions, is particularly important to Dyson’s future in the United States. *Id.* ¶ 16 (A217). The infringing Hoover Fusion began appearing in Wal-Mart stores about two weeks before Dyson’s own national rollout with Wal-Mart. *Id.* ¶¶ 15, 18 (A217, 18).

Dyson has a limited window of opportunity—about twelve to eighteen months—to succeed in penetrating the mass market in the United States. Hyman Aff. ¶ 23 (A220). To be successful, Dyson must build and maintain momentum. *Id.* Right now, as a result of its superior products, patented technology and marketing efforts, momentum is on Dyson’s side, but momentum can be lost quickly and even reversed. *Id.* ¶¶ 23-24 (A220). If that occurs, retailers would become less excited about selling its products, and Dyson’s image among consumers would suffer, ultimately leading to decline and an inability to penetrate the mass market. Hyman Aff. ¶ 24 (A220).

The presence on the market—and particularly in Wal-Mart stores—of Maytag’s infringing Hoover Fusion vacuum cleaner seriously threatens Dyson’s effort to

penetrate the mass market. Hyman Aff. ¶ 25 (A220). That threat will only become more serious if Hoover, with its decades-old brand, begins selling the Fusion at additional retailers. *Id.* Hoover has in place a large distribution network, and, indeed, Hoover appliances are sold at almost all of the important American retailers, including Sears, Lowe's, Best Buy, Target, K-Mart, Bed Bath & Beyond, Linens & Things, JC Penney, Costco, Sam's Club and Amazon.com. Dyson Aff. ¶ 36 (A21).

ARGUMENT

Under 35 U.S.C. § 283, this Court may grant a preliminary injunction to a patentee. Indeed, the availability of an injunction is central to the patent right. *Smith Int'l, Inc. v. Hughes Tool Co.*, 718 F.2d 1573, 1578 (Fed. Cir. 1983) ("Without the right to obtain an injunction, the right to exclude granted to the patentee would have only a fraction of the value it was intended to have, and would no longer be as great an incentive to engage in the toils of scientific and technological research.").

The standards to be applied in granting a preliminary injunction in a patent infringement action are no different—and no more stringent—than in other areas of the law. *Johnson & Johnson Consumer Prod., Inc. v. Ormco Corp.*, Civ. A. Nos. 87-341-JJF, 87-547-JJF, 1988 WL 155634, at *3 (D. Del. Sept. 29, 1988) ("[T]he Federal Circuit has definitively stated that the [preliminary injunction] standards applied in patent cases should be no more stringent than those applied in other areas of the law."). Whether a preliminary injunction should issue thus turns on four factors: "(1) a reasonable likelihood of success on the merits; (2) irreparable harm if the injunction were not granted; (3) the balance of the hardships; and (4) the impact of the injunction on the public interest." *Purdue Pharma L.P. v. Boehringer Ingelheim GMBH*, 237 F.3d 1359,

1363 (Fed. Cir. 2001). “[T]he district court must weigh and measure each factor against the other factors and against the form and magnitude of the relief requested.” *Hybritech, Inc. v. Abbott Labs.*, 849 F.2d 1446, 1451 (Fed. Cir. 1988).

In this case, each of the four factors weighs strongly in favor of the Court’s granting a preliminary injunction.

I. There Is a Strong Likelihood of Success on the Merits.

In determining the likelihood of success on the merits, the Court must consider patent validity and infringement. *Hybritech, Inc.*, 849 F.2d at 1451. The four patents-in-suit are valid and clearly infringed by Maytag’s Hoover Fusion.

A. The Patents-In-Suit Are Valid.

1. The Patents Are Presumed Valid.

Under 35 U.S.C. § 282, patents enjoy a presumption of validity, and “the burden of establishing invalidity of a patent or any claim thereof shall rest on the party asserting such invalidity.” Thus, having satisfied the United States Patent and Trademark Office that a patent should issue, Dyson is entitled to, and may correctly rest on, this presumption of validity. *Purdue Pharma*, 237 F.3d at 1365 (“Every patent is presumed valid, so if [defendant] fails to identify any persuasive evidence of invalidity, the very existence of the patent satisfies [plaintiff’s] burden on validity.”); *Canon Computer Sys., Inc. v. Nu-Kote Int’l, Inc.*, 134 F.3d 1085, 1088 (Fed. Cir. 1998) (“[A] patent is presumed valid, and this presumption exists at every stage of the litigation.”).

2. There Is Also Objective Evidence of Validity.

In addition to this presumption of validity, there is substantial, objective evidence establishing that Dyson’s patents are valid. In examining validity, courts often

rely on “secondary considerations” that analyze “how a patent is viewed by those directly interested in a patented product.” *Ortho Pharm. Corp. v. Smith*, Civ. A. No. 90-0242, 1990 WL 18681, at *8 (E.D. Pa. Feb. 23, 1990). Among others, these objective indicia of validity include: whether the patent meets a long felt need, the competitiveness of the relevant industry, the length of time the patent was practiced and whether it was ever infringed, and whether the patent was licensed to others. *Id.*; *Zenith Labs., Inc. v. Eli Lilly and Co.*, 460 F. Supp. 812, 821-22 (D.N.J. 1978).

a. Long-Felt Need for the Invention

A failure of others to meet a long-standing problem is relevant to validity. *Uniroyal, Inc. v. Rudkin-Wiley Corp.*, 837 F.2d 1044, 1054 (Fed. Cir. 1988). The vacuum cleaner industry has been in existence for about 100 years. According to its website, Hoover sold its first portable electric upright vacuum cleaner in 1908. Yet, until James Dyson came along, vacuum cleaner technology had changed little over the years. Since the early 1900s, household vacuum cleaners have generally consisted of an electric motor, a fan and a bag through which the air carrying the dirt was sucked or blown. Dyson Aff. ¶14 (A12). This basic design has been the same for all these years, and the consequence has been that the bag, which trapped the dirt, often became clogged, resulting in diminished performance. *Id.* ¶ 10 (A10).

Dyson’s cyclonic technology revolutionized the vacuum cleaner business by eliminating reliance on bags to filter dirt and debris from the air and replacing them instead with cyclones that perform that function. Dyson Aff. ¶ 15 (A12-13). These cyclones use centrifugal force to separate dirt and debris from the air and deposit them into an easily emptied container. *Id.* ¶ 16 (A13). Because the dirt and debris are trapped

at the bottom of the container, and the air flow does need not travel through a bag or other membrane that can clog, the vacuum cleaner does not lose suction. *Id.* The four patents-in-suit cover technologies that improve the ability of Dyson's cyclonic vacuum cleaners to separate dirt and debris from the air without use of a bag or similar device. Dyson Aff. ¶¶ 27-31 (A17-19). Such technologies, along with other Dyson improvements, have helped satisfy a long-felt need in the vacuum cleaner market.

b. Competitiveness of the Relevant Industry

The United States vacuum cleaner industry is "quite mature and crowded." Hyman Aff. ¶ 9 (A214). There are entrenched competitors, such as Maytag's Hoover division, which have been around for decades. *Id.* Indeed, Wal-Mart's website alone contains more than 60 different models of vacuum cleaners selling under nine separate brand names. *See* http://www.walmart.com/catalog/search-ng.gsp?search_constraint=4044&search_query=vacuum+cleaners&ics=20&ico=0. The declining price of vacuum cleaners in the United States is further evidence of the competitiveness of the industry. Hyman Aff. ¶ 9 (A214).

c. Length of Non-Infringement of Patents

The length of time since the issuance of a patent is relevant to validity because it means that the industry has had time to examine the patent and evaluate its validity. *Zenith Labs.*, 460 F. Supp. at 821. Periods of time as short as five years have been found to be evidence of acquiescence in a patent's validity. *Id.* The '748 Patent was issued in 1987; the '515 and '008 Patents were issued in 1989; and the '038 Patent was issued in 1999. Since they were issued, only the '748 and '515 Patents have been

infringed, and the alleged infringer, Amway, subsequently licensed the technology.

Dyson Aff. ¶ 35 (A20-21).

d. Licensing Technology to Others

Licenses are additional proof of validity as they indicate “a decision to pay tribute to the invention.” *Ortho Pharm.*, 1990 WL 18681, at *8. James Dyson has licensed three of the four patents-in-suit. Dyson Aff. ¶ 19 (A14-15). One of the licensees, Amway, became a licensee of certain Dyson technology, including the technology in the ’748 and ’515 Patents, after Dyson brought a patent infringement litigation. *Id.* ¶ 35 (A21). Although not a prior adjudication of validity, Amway’s post-dispute agreement to license Dyson’s technology is evidence of validity. *See California Med. Prods., Inc. v. Emergency Med. Prods., Inc.*, 796 F. Supp. 640, 643 (D.R.I. 1992) (that other parties accused of infringing patent subsequently entered into consent judgments acknowledging validity of patent was evidence of patent’s validity).

B. Maytag’s Hoover Fusion Vacuum Cleaner Infringes the Patents-in-Suit.

Determining infringement is a two-step process. First, the claims are construed; and second, the properly construed claims are compared to the accused device. *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 976 (Fed. Cir. 1995). As Dyson’s expert, Gareth Jones, explains, Maytag’s Hoover Fusion is a cyclonic vacuum cleaner that employs technologies claimed in at least one claim of each of the four patents-in-suit. Jones Aff. ¶ 10 (A85). A list of the infringed claims is contained in the Appendix accompanying this brief at pages A1-6.

Mr. Jones obtained a mechanical engineering degree from Loughborough University in Leicestershire, England in 1988 and a Masters in Industrial Design Engineering from the Royal College of Art in 1991. Jones Aff. ¶ 3 (A81). Since 1988, except when he was obtaining his masters degree, Mr. Jones has worked as a product design and development engineer in the United Kingdom, both as an employee of Dyson and as an independent consultant. *Id.* ¶ 4 (A81). Several of these years were spent with James Dyson designing and developing vacuum cleaners employing cyclonic technology. *Id.* ¶¶ 4-6 (A81-82). As a result of that experience, as well as having worked with others at Dyson involved in designing and developing various aspects of cyclonic vacuum cleaners, Mr. Jones—who is now an independent consultant, with no continuing involvement with James Dyson or his business—is an expert in the field. *Id.* ¶ 6 (A82).

1. The '515 Patent

Mr. Jones has reviewed the '515 Patent and compared its claims to the cyclonic apparatus in the Hoover Fusion.² He has concluded that the Hoover Fusion contains all the elements of, and therefore infringes, Claim No. 14 of the '515 Patent. Jones Aff. ¶¶ 19-39 (A88-100).

Claim No. 14 of the '515 Patent includes the improved circular dirt collection chamber below the inner cyclone that has a diameter at the end furthest from the opening of the bottom of the inner cyclone that is at least three times the diameter of that opening. *See* pp. 13-14, *supra*. This improved design of the dirt collection chamber

² Mr. Jones interpreted the elements of the claims in the patents-in-suit as one of ordinary skill in the art of cyclonic vacuum cleaner technology would interpret them in light of the patent specifications. Jones Aff. ¶ 10.

helps to prevent dirt and other debris from re-entering the inner cyclone after being deposited in the dirt collection chamber. Jones Aff. ¶ 13 (A86). The Hoover Fusion copies and contains this invention: the diameter of the dirt collection chamber furthest from the cone opening on the Hoover Fusion is about 90.6 millimeters, and the diameter of the Fusion's cone opening is about 29.10 millimeters. *Id.* ¶ 34 (A96-97). Thus, the diameter of the dirt collection chamber furthest from the cone opening is about 3.11 times the diameter of the cone opening. *Id.* A photograph of this dirt collection chamber, which is attached to the Jones Affidavit as Exhibit 15 (A176), is shown below.

Exhibit 15 – Photograph of the dirt collection chamber on the Hoover Fusion



Note - Dirt collection chamber (shown removed from the cone assembly for clarity)

Maytag's Hoover Fusion has all the elements of Claim No. 14, including the significant relationship of these two diameters.

2. The '748 Patent

Mr. Jones has reviewed the '748 Patent and compared its claims to the cyclonic apparatus in the Hoover Fusion. Again, the Hoover Fusion contains all the elements of, and therefore infringes, Claim Nos. 15, 16 and 17 of the '748 Patent. Jones Aff. ¶¶ 40-53 (A100-105).

Claim No. 15 of the '748 Patent includes the disc invention that surrounds the inner cyclone and is designed, among other things, to prevent larger particles and long strands from leaving the outer container and clogging the air outlet from the container. See pp. 14-15, *supra*. The Fusion copies and contains this invention. Jones Aff. ¶¶ 47-49 (A103-04). The below photograph, Exhibit 20 to the Jones Affidavit, shows that, as provided in the patent's claims, the disc on the Fusion's cyclonic apparatus surrounds the inner cyclone. Mr. Jones also states that based on his expertise and experience, the Fusion's disc performs the function set out in the patent. *Id.* ¶ 49 (A104).

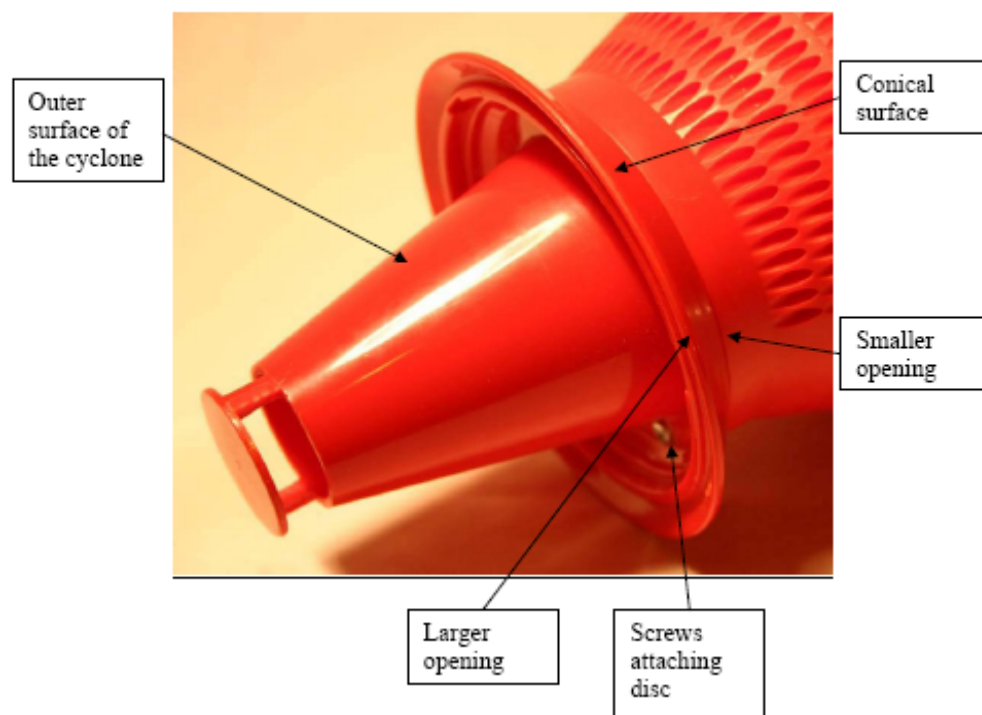
Exhibit 20 – Photograph illustrating location of the disc means on the Hoover Fusion



Note – Dirt collection chamber removed for clarity

Claim Nos. 16 and 17 of the '748 Patent relate to the shape (*e.g.*, circular and conical) and location (*e.g.*, around the longitudinal axis of the inner cyclone) of the disc on the cyclonic apparatus. Mr. Jones has found that the Hoover Fusion copies and contains all of the elements of these claims as well. Jones Aff. ¶¶ 50-53 (A104-05). As can be seen from the photograph below, which is Exhibit 22 to the Jones Affidavit (A190), the Fusion's disc has a circular and conical shape, and is located around the longitudinal axis of the inner cyclone.

Exhibit 22 – Photograph showing details of the disc means on the Hoover Fusion



3. The '008 Patent

Mr. Jones has reviewed the '008 Patent and compared its claims to the cyclonic apparatus in the Hoover Fusion. He has concluded that the Hoover Fusion

contains all the elements of, and therefore infringes, Claim Nos. 1, 2, 3, 7, 11, 23, 24 and 25 of the '008 Patent. Jones Aff. ¶¶ 54-76 (A105-13).

Claim No. 1 of the '008 Patent includes the improvement of the disc and shroud combination, where the shroud is a covering with perforations that acts like a screen and the disc is located below the shroud. *See* pp. 15-16, *supra*. The Hoover Fusion copies and contains all the elements of this claim, including the disc and shroud. Jones Aff. ¶¶ 61-67 (A108-11). The existence and location of the Fusion's shroud and disc can be seen in Exhibit 20 to the Jones Affidavit (A188), shown on page 27, *supra*.

Claim Nos. 2, 3 and 7 of the '008 Patent relate to the shape (*e.g.*, circular and conical) and location (*e.g.*, "around the longitudinal axis of the cyclone," and "about one-third of the distance between the cone opening and the air inlet of the cyclone") of the disc on the cyclonic apparatus. Mr. Jones has found that the Hoover Fusion copies and contains all of the elements of these claims. Jones Aff. ¶¶ 68-73 (A111-12). As discussed, the Fusion's disc has a circular and conical shape, and is located around the longitudinal axis of the inner cyclone. Using an electronic height gauge, Mr. Jones determined that the distance between the cone opening and the bottom of the disc was "about one-third of the distance"—in fact, 29.6% of the distance—between the cone opening and the mid-point of the air inlet of the inner cyclone. Jones Aff. ¶ 73 (A112). Measuring from the mid-point of the disc, a reasonable measuring point, this distance is 33.03%—almost exactly one-third of the distance between the cone opening and the air inlet of the inner cyclone. *Id.*

Claim No. 11 of the '008 Patent requires that the outer container of the cyclonic apparatus have a substantially cylindrical wall. Jones Aff. ¶ 74 (A112). Mr. Jones found that the Fusion contains this element. *Id.* ¶ 75 (A113).

The elements of Claim Nos. 23 through 25 of the '008 Patent are either the same as the elements of Claim Nos. 1 through 3 of the '008 Patent or differ from those elements in ways that are immaterial here. Jones Aff. ¶ 76 (A113). Thus, for the same reasons that Mr. Jones found that the Fusion contains all the elements of Claim Nos. 1 through 3 of the '008 Patent, he also concluded that the Fusion contains all the elements of Claim Nos. 23 through 25 of that patent.

4. The '038 Patent

Mr. Jones has reviewed the '038 Patent and compared its claims to the cyclonic apparatus in the Hoover Fusion. That product contains all the elements of, and therefore infringes, Claim Nos. 1, 2, 3, 7, 13 and 14 of the '038 Patent. Jones Aff. ¶¶ 77-94 (A113-20).

Claim No. 1 of the '038 Patent has six elements, including an element specifying that the distance between the cone opening at the bottom of the inner cyclone and the base surface of the container be either less than 8 millimeters or between 30 and 70 millimeters. *See* pp. 16-17, *supra*. The Hoover Fusion literally copies and contains five of the six claim elements. Jones Aff. ¶¶ 79-82 and 84 (A114-16). As to the sixth element—the distance between the cone opening and the base surface— Mr. Jones has determined, using a coordinate measuring machine, that the average of this distance on the two Hoover Fusion vacuum cleaners that he tested was about 70.82 millimeters, less

than 1 millimeter above the range set out in the '038 Patent. Jones Aff. ¶ 83 (A115).

That distance is less than the diameter of the following dot: •

Maytag cannot avoid infringement through such a trivial deviation from the claimed range. To the extent the Fusion does not literally infringe the '038 Patent, it infringes under the doctrine of equivalents. Under that doctrine, there is infringement if the accused device performs substantially the same function in substantially the same way and for substantially the same result as set forth in the claim element. *Hilton Davis Chem. Co. v. Warner-Jenkinson Co., Inc.*, 114 F.3d 1161, 1164 (Fed. Cir. 1997).

“[P]atent claims must protect the inventor not only from those who produce devices falling within the literal claims of the patent but also from copyists who make unimportant and insubstantial changes in the patent which, though adding nothing, would be enough to take the copied matter outside the claim, and hence outside the reach of the law.” *Festo Corp. v. Shoketsu, Kinzoku Kogyo Kabushiki Co., Ltd.*, 535 U.S. 722, 732 (2002) (citation and internal quotations omitted); *see also Creo Prods. Inc. v. Presstek, Inc.*, No. C.A. 99-525-GMS, 2001 WL 637397, at *5 (D. Del. May 11, 2001) (Sleet, J.) (“A claim limitation is equivalently present in an accused device if only ‘insubstantial differences’ distinguish the missing claim limitation from the corresponding elements of the accused device.” (citation omitted)).

Thus, in *Hilton Davis*, the United States Court of Appeals for the Federal Circuit upheld a jury’s verdict of equivalence where the patent recited a pH range “from approximately 6.0 to 9.0” for an “ultrafiltration” process and the infringer’s ultrafiltration process used a pH of 5.0. *Hilton Davis Chem. Co.*, 114 F.3d at 1164. Although there was nothing in the written description part of the patent specification to indicate that the

invention extended beyond the specific range given in the claim, the court held that there was substantial evidence to prove that one of ordinary skill in the art would know that performing the ultrafiltration process at a pH of 5.0 allowed the invention to perform substantially the same function in substantially the same way to reach substantially the same result as performing that process at a pH of 6.0. *Id.* See also *Abbott Labs. v. Dey, L.P.*, 287 F.3d 1097, 1100, 1107-08 (Fed. Cir. 2002) (holding that lower court erred in not considering application of doctrine of equivalents where a claim element included a phospholipid content of between “68.6% [to] 90.7%” and the alleged infringer’s product contained a phospholipid content of 91.8% in one sample and 94.5% in another sample); *Pall Corp. v. Micron Separations, Inc.*, 66 F.3d 1211, 1220 (Fed. Cir. 1995) (affirming district court’s finding that a chemical ratio of 4:1 infringed a patent’s claim of “about 5:1 to 7:1” because there was a “close similarity in chemical structure and the identity of function, way and result to the claimed membrane.”).

The facts here support application of the doctrine of equivalents. The function of setting the distance between the cone opening at the bottom of the inner cyclone and the base surface of the container to a particular range in the claim element is to achieve improved dirt or dust separation. Jones Aff. ¶ 83 (A115). The Hoover Fusion achieves the same function by setting the distance between the cone opening at the bottom of the inner cyclone and the base surface of the container at about 70.82 millimeters. *Id.* The way this is achieved in the claim element is by setting the distance at less than 8 millimeters or between 30 millimeters and 70 millimeters. *Id.* The way this is achieved in the Hoover Fusion is by setting a distance that is less than 1 millimeter above the claimed range, and thus is substantially the same as the claim element. *Id.* By

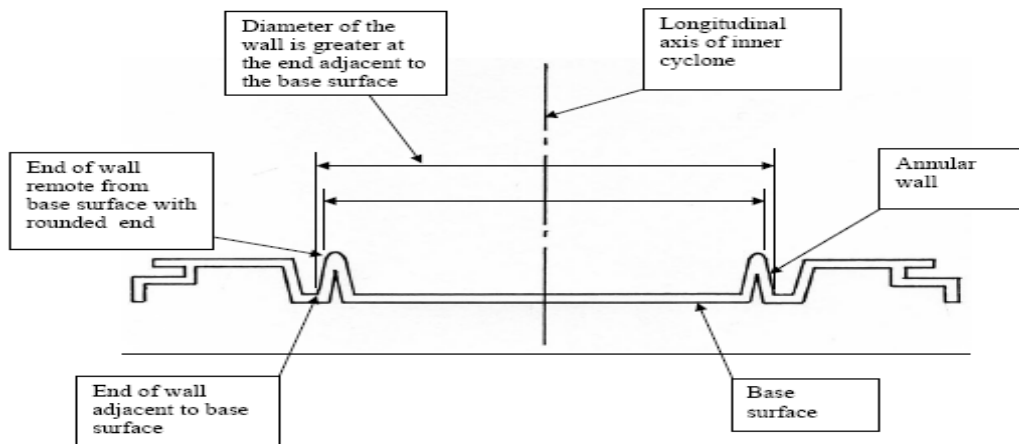
using a distance between the cone opening and the base surface of 70.82 millimeters, the Hoover Fusion is able to achieve the same result (improved separation of dirt or dust from air) in substantially the same way as the claim element. *Id.* ¶¶ 83-84 (A115-17). The Fusion therefore infringes Claim No. 1 of this patent, as well.

Claim No. 2 of the '038 Patent is dependent on Claim No. 1, and requires that the base surface below the cone opening be substantially planar. Jones Aff. ¶ 86 (A117). Mr. Jones has found that the Hoover Fusion's base surface copies and contains this claim element. *Id.*

Claim No. 3 of the '038 Patent is dependent on Claim No. 2, and requires that the distance between the cone opening and the base surface be measured parallel to the longitudinal axis between the ends of the inner cyclone. Jones Aff. ¶ 88 (A118). Mr. Jones took the 70.82 millimeter measurement discussed in regard to Claim No. 1 at this required location. *Id.*

Claim Nos. 7, 13, and 14 of the '038 Patent are dependent on Claim No. 3, and relate to the location of the diameter of the base surface (*e.g.*, around the longitudinal axis of the inner cyclone) and the existence of an upwardly extending annular wall from the base surface that (a) has a diameter greater at the end adjacent the base surface than at the end remote the base surface; and (b) is radiused, or rounded, at the end of the wall remote from the base surface. Jones Aff. ¶¶ 89-94 (A118-20). Mr. Jones has found that the Hoover Fusion copies and contains all of the elements of these claims. *Id.* The diagram below, which is Exhibit 29 to the Jones Affidavit, illustrates the annular wall on the base surface of the Hoover Fusion.

Exhibit 29 – Diagram illustrating annular wall from base surface of receiving chamber of the Hoover Fusion



Note - schematic drawing, not to scale

II. Dyson Will Suffer Irreparable Harm If Preliminary Relief Is Not Granted.

A. Irreparable Harm Is Presumed Upon a Clear Showing of Validity and Infringement.

Having made a clear showing that the patents-in-suit are valid and that Maytag is infringing them, Dyson is entitled to a presumption of irreparable harm. *Fisher-Price, Inc. v. Safety 1st, Inc.*, 279 F. Supp. 2d 526, 528 (D. Del. 2003) (Sleet, J.); *Impax Labs, Inc. v. Aventis Paharm., Inc.*, 235 F. Supp. 2d 390, 395 (D. Del. 2002). As a patent holder, Dyson has the absolute right to exclude others from using that which is claimed in the patents for the entire term of those patents. *Polymer Tech., Inc. v. Bridwell, H.A.*, 103 F.3d 970, 976 (Fed. Cir. 1996) (“The right to exclude others from a specific market . . . is an essential element of the patent right.”). This presumption of irreparable harm “derives in part from the finite term of the patent grant, for patent expiration is not suspended during litigation, and the passage of time can work irreparable harm.” *H.H. Robertson Co. v. United States Deck, Inc.*, 820 F.2d 384, 390

(Fed. Cir. 1987), *abrogated by*, *Markman v. Westview Instruments, Inc.*, 52 F.3d 967 (Fed. Cir. 1995). As a result, “the nature of the patent grant weighs against holding that monetary damages will always suffice to make the patentee whole.” *Hybritech Inc.*, 849 F.2d at 1456.

B. Even Without the Presumption, Dyson Will Clearly Suffer Irreparable Harm If a Preliminary Injunction Is Not Issued.

In addition to the presumption, a number of other factors compel a finding of irreparable harm here. As explained in the Hyman Affidavit, Dyson has achieved extraordinary success in the U.S. market in a relatively short period of time. Hyman Aff. ¶ 10 (A215). But this success may be quite impermanent, and is due largely to sales to “early adopters.” *Id.* ¶ 13 (A216). Dyson has yet to reach the majority of potential consumers—the so-called “mass market.” *Id.* ¶ 14 (A216-17). Although Dyson currently accounts for nearly 29% of the U.S. upright vacuum cleaner market as measured by value, it accounts for only about 10% in terms of units. *Id.* ¶ 10 (A215). For Dyson to expand or even maintain its position, it must use its current momentum to penetrate the mass market. *Id.* Maytag’s introduction of the Hoover Fusion—and at Wal-Mart stores, where Dyson was about to enter as well—is a clear attempt to impede Dyson’s growth in the United States at a critical time for Dyson.

Maytag has designed and is marketing the Hoover Fusion in an attempt to mislead consumers into believing that the Fusion delivers Dyson technology at a lower price. Hyman Aff. ¶ 25 (A220-21). Maytag’s decades-old “Hoover” brand gives the Fusion immediate recognizability and credibility among consumers, particularly in the mass market. *Id.* On top of that, Hoover’s strong distribution network makes the threat

posed by the Fusion even more serious. *Id.* Unless Dyson receives preliminary injunctive relief, it will suffer irreparable harm. *Id.* ¶ 26 (A221). If Dyson is required to wait a year or longer for a permanent injunction after a full trial on the merits, it may be too late. By then, Dyson may have lost its momentum and failed to penetrate the mass market as a direct result of the presence of the infringing product. That failure may not be reversible. *See Fisher-Price*, 279 F. Supp. 2d at 528 (holding that “a legal remedy is inadequate to redress the loss in market share that Safety 1st’s continuing infringing sales would cost Fisher-Price” and granting permanent injunction).

Moreover, by issuing a preliminary injunction now, the Court has a unique opportunity to enjoin Maytag’s infringement of Dyson’s patents shortly after the commercial release of the infringing product. If Maytag begins broadly promoting and distributing the Hoover Fusion, this Court may well be unable to turn back the clock and restore Dyson—and the marketplace—to their pre-infringement position. By then, the market dynamics may have shifted.

Lastly, the limited amount of time remaining on two of the four patents strongly supports the issuance of a preliminary injunction. The ’748 Patent expires on February 26, 2006, and the ’515 Patent expires on May 2, 2006. Without a preliminary injunction, the term of those patents (at least as to Maytag) will be shortened by Maytag’s unlawful conduct. *Atlas Powder Co. v. Ireco Chem.*, 773 F.2d 1230, 1234 (Fed. Cir. 1985) (“Patent rights do not peter out as the end of the patent term . . . approaches.”). In that case, Maytag will have awarded itself a United States license to Dyson’s patented technology for the remaining life of those two patents, in contravention of the policies underlying the patent laws. *See Smith Int’l*, 718 F.2d at 1577-78; *see also Fisher-Price*,

279 F. Supp. 2d at 528 (recognizing that “there are certain tangential benefits associated with patent rights, such as a marketplace reputation for enforcing one’s patents, the value of which cannot be quantified in monetary damages.”).

III. The Balance of Hardships Weighs in Favor of Issuing a Preliminary Injunction.

The balance of hardships inquiry requires a balancing of “the harm that will occur to the moving party from the denial of the preliminary injunction with the harm that the non-moving party will incur if the injunction is granted.” *Hybritech, Inc.*, 849 F.2d at 1457. This factor weighs heavily in favor of granting a preliminary injunction.

Although it has achieved significant successes to date in the United States, Dyson’s continued success is dependent on its current efforts to penetrate the mass market. The presence of the infringing product severely jeopardizes those efforts. If Dyson’s current attempt to reach the mass market fails, Dyson may not be able to regenerate the necessary momentum in the foreseeable future, if ever.

On the other hand, Maytag describes itself as “among the top four major appliance companies in the North American market, offering consumers a full line of washers, dryers, dishwashers, refrigerators and ranges distributed through large and small retailers across the United States and Canada.” Maytag Corp., Annual Report (Form 10-K) at 1 (February 18, 2005) (A227). Vacuum cleaners are a small part of Maytag’s business, and the Hoover Fusion is just one model among the more than sixty models of Hoover vacuum cleaners sold by Maytag. As a result, Maytag will not suffer any meaningful hardship if a preliminary injunction is granted. To the contrary, Maytag

should desire an early judicial resolution of the infringement question before it begins promoting and selling the Hoover Fusion more broadly.

In *Rosen Entertainment Sys., LP v. Eiger Vision*, 343 F. Supp. 2d 908, 921 (C.D. Cal. 2004), the court found that the balance of hardships weighed in favor of an injunction because plaintiff was a “single product company” while defendant sold a “wide range of . . . products [with] at least 60 other products which it [could] continue to sell notwithstanding issuance of the requested injunction.” The court further found that defendant was only selling the allegedly infringing product for “a few months.” *Id.* The court stated that “while [defendant] may be harmed if an injunction does issue, the harm is likely to be less significant than the harm to [plaintiff] because [defendant] can continue to sell its many other products that are not at issue in this action.” *Id.* That ruling applies with equal force here.

IV. The Public Interest Supports a Preliminary Injunction.

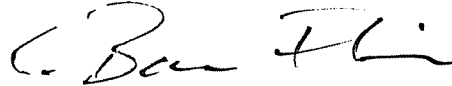
The grant of a preliminary injunction is in the public interest. The patent laws’ grant of exclusivity is to “induce those skilled in the ‘useful arts’ to expend the time and money necessary to research and develop new products and to induce them ‘to bring forth new knowledge.’” *Eli Lilly & Co. v. Premo Pharm. Labs.*, 630 F.2d 120, 137 (3d Cir. 1980). The protection of patent rights is thus a significant benefit to the public as a whole. Indeed, “Congress has made the legislative determination that it is not in the public interest to permit the infringement of those temporary monopolies as it undermines investor incentive.” *Lifescan, Inc. v. Polymer Tech. Int’l Corp.*, 35 U.S.P.Q.2d 1225, 1241 (W.D. Wash. 1995).

There are no countervailing adverse effects on the public interest that would outweigh the public's interest in full enforcement of patent rights. A preliminary injunction would remove from the marketplace only one of the many vacuum cleaners available to consumers today, including the more than sixty other vacuum cleaner models available from Maytag alone. The removal of that one infringing product will not result in any meaningful harm to the public. *See Rubbermaid Commercial Prods., Inc. v. Contico Int'l Inc.*, 836 F. Supp. 1247, 1263 (W.D. Va. 1993) (“[B]ecause the product at issue is, after all, one waste receptacle among many and not a wonder drug in short supply, the public will not be harmed significantly by its removal from the market.”).

CONCLUSION

Dyson's motion for a preliminary injunction should be granted.

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July 29, 2005

CERTIFICATE OF SERVICE

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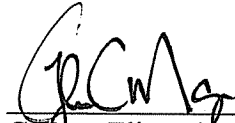
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